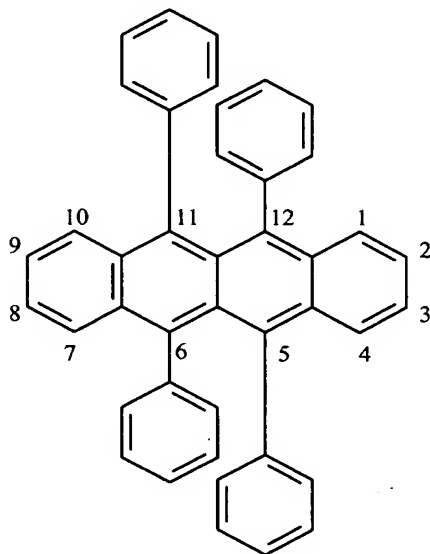


**WHAT IS CLAIMED IS:**

1. An OLED device comprising a light-emitting layer (LEL) containing a host and an emitting dopant located between a cathode and an anode wherein the dopant is an orange-red light emitting rubrene derivative represented by formula (I):



Formula (I)

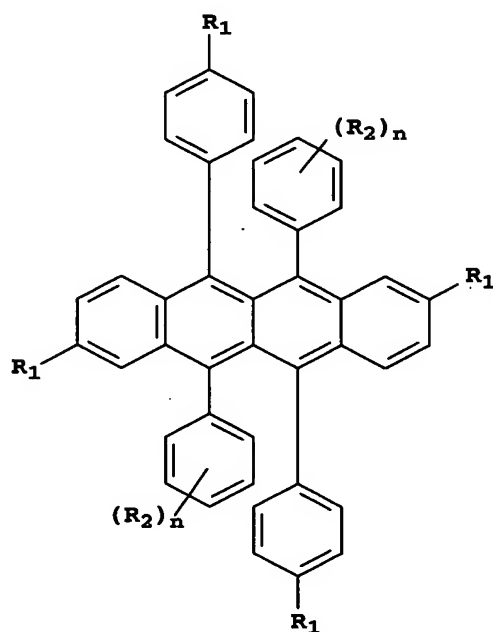
wherein:

- a) there are identical aromatic groups at the 2- and 8-positions;
- b) the phenyl rings in the 5- and 11-positions contain only para-substituents identical to the aromatic groups in paragraph a); and
- c) the phenyl rings in the 6- and 12-positions are substituted or not.

2. The device of claim 1 comprising a further light-emitting compound to provide a white light emission.

3. The device of claim 2 further comprising a blue light-emitting compound to provide a white light emission.

4. The device of claim 2 further comprising a filter over-lying the device.
5. The device of claim 2 wherein the layer comprises a host and dopant where the dopant is present in an amount of up to 10%-wt of the host.
6. The device of claim 5 wherein the dopant is present in an amount of 0.1-5.0%-wt of the host.
7. The device of claim 1 wherein the dopant is represented by formula (II):



Formula (II)

wherein

R<sub>1</sub> is an aromatic carbocyclic or heterocyclic group;

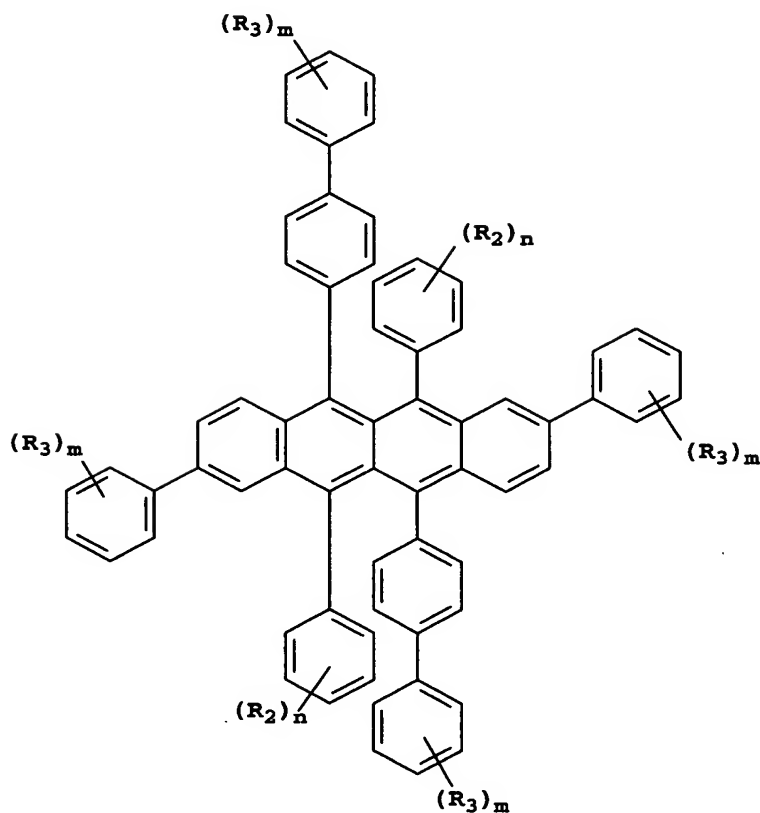
R<sub>2</sub> is a substituent group;

n is 0-5;

provided that all R<sub>1</sub> are the same; and

provided further, that the R<sub>2</sub>, their location and n value on one ring are the same as those on the second ring.

8. The device of claim 1 wherein the dopant is represented by formula (III):



Formula (III)

wherein

- $R_2$  and  $R_3$  are independently selected substituent groups;  
 $n$  and  $m$  are independently 0-5;  
provided that the  $R_2$ , their location and  $n$  value on one ring are the same as those on the second ring; and  
provided further, that the  $R_3$ , their location and  $m$  value on one ring are the same as those on all rings containing  $R_3$ .

9. The device of claim 8 wherein  $m$  is 0.
10. The device of claim 7 comprising a further light-emitting compound to provide a white light emission.

11. The device of claim 10 further comprising a blue light-emitting compound to provide a white light emission.

12. The device of claim 10 further comprising a filter over-lying the device.

13. The device of claim 7 wherein  $R_1$  is a phenyl group.

14. The device of claim 7 wherein  $R_2$  is located in the meta or para positions of the phenyl group.

15. The device of claim 7 wherein  $R_2$  is fluorine.

16. The device of claim 7 wherein  $R_2$  is a fluorine-containing group.

17. The device of claim 1 wherein the host is an amine compound.

18. The device of claim 1 wherein the host comprises *N,N'*-di-1-naphthalenyl-*N,N'*-diphenyl-4, 4'-diaminobiphenyl.

19. The device of claim 7 wherein the substituents are selected to provide an emitted light having an orange-red hue.

20. The device of claim 1 wherein the substituents are selected to provide a reduced loss of initial luminance compared to the device containing no rubrene compound.

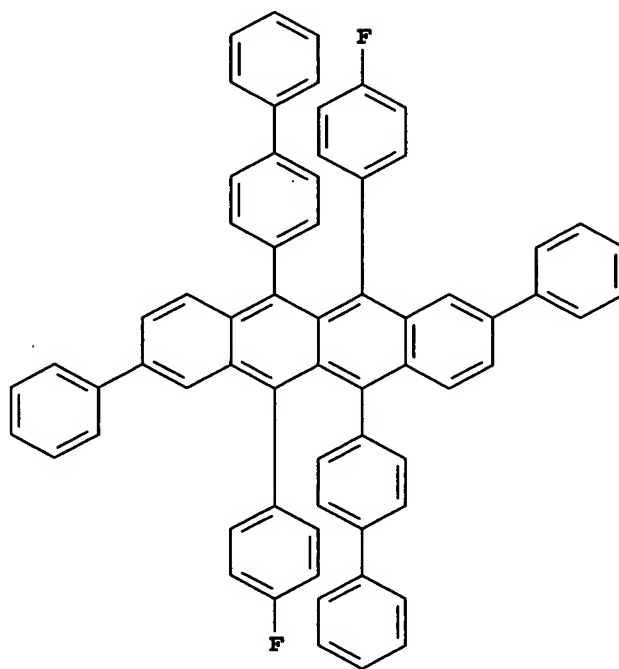
21. The device of claim 7 wherein  $R_2$  are independently selected from the group consisting of fluorine, fluorine containing groups, alkyl, aryl, alkoxy and aryloxy groups.

22. The device of claim 7 wherein the dopant is present in an amount of up to 10%-wt of the host.

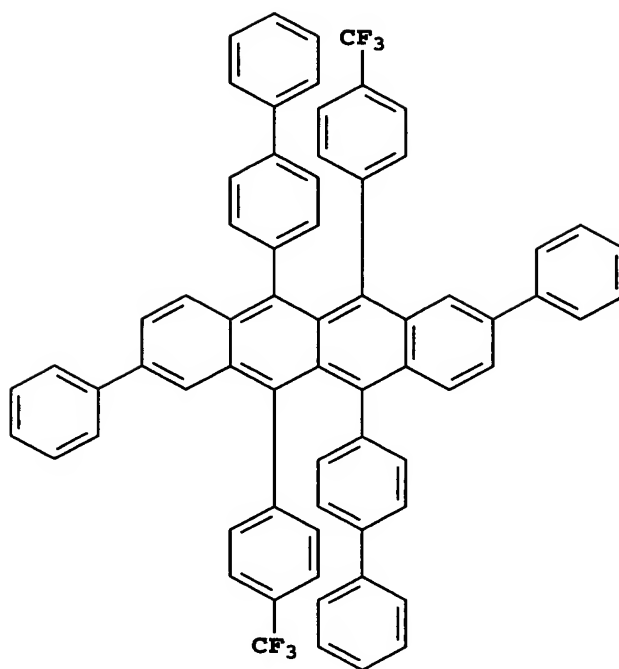
23. The device of claim 22 wherein the dopant is present in an amount of 0.1-5.0%-wt of the host.

24. The device of claim 1 wherein the rubrene derivative is selected from the following:

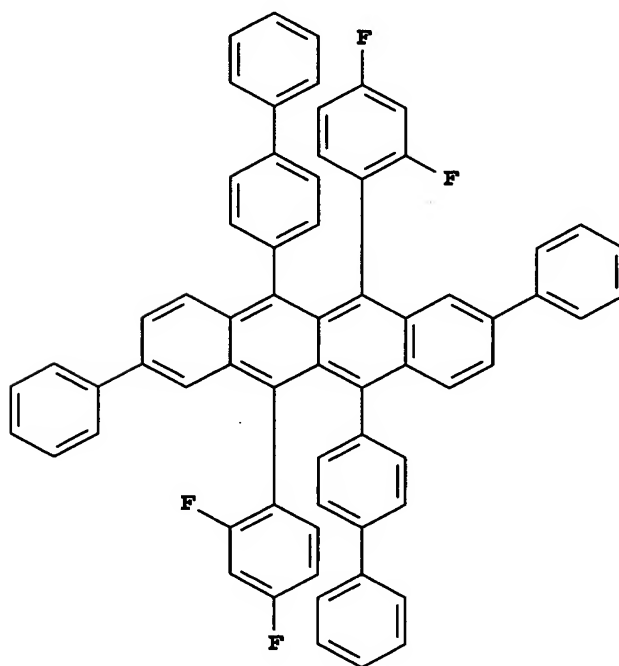
**Inv-1**

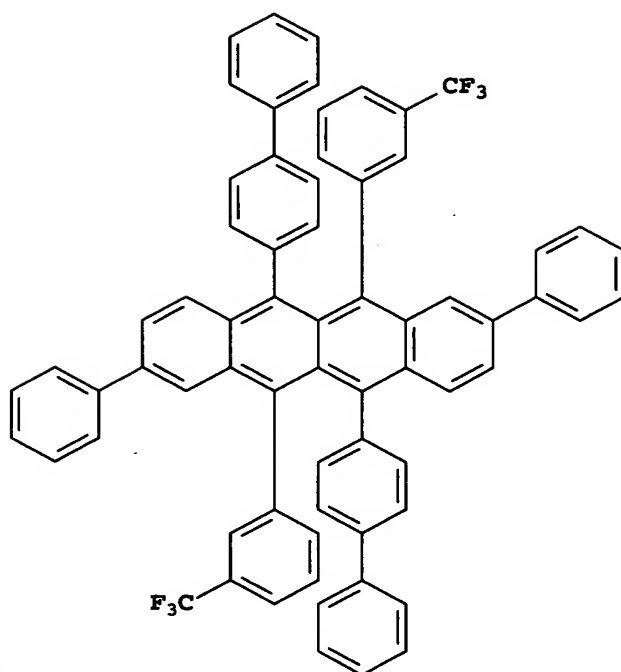


**Inv-2**



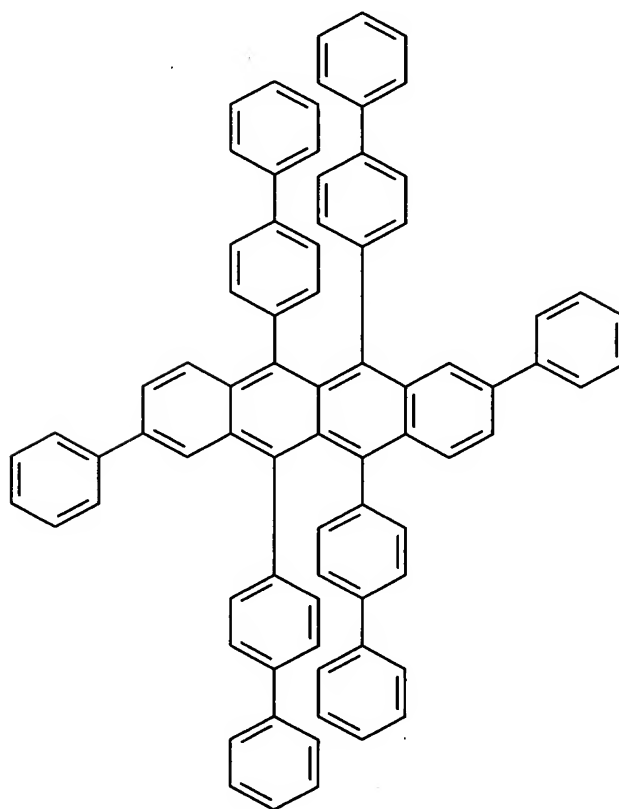
**Inv-3**





**Inv-4**

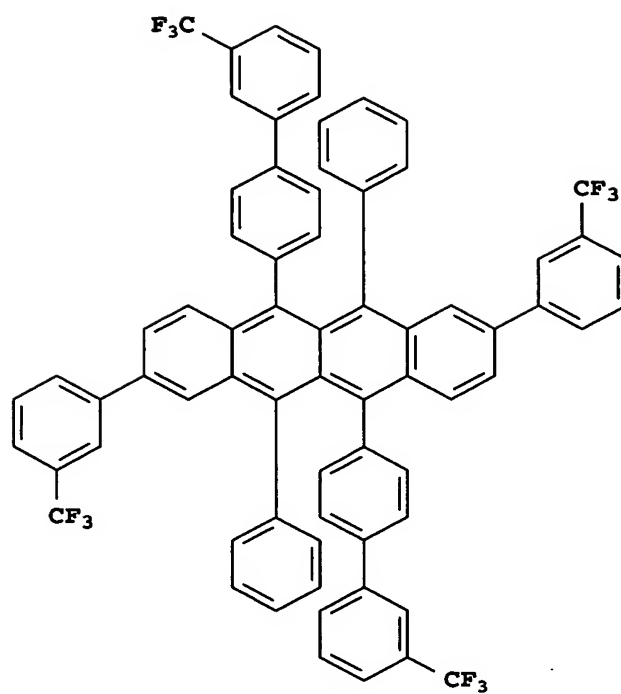
**Inv-5**



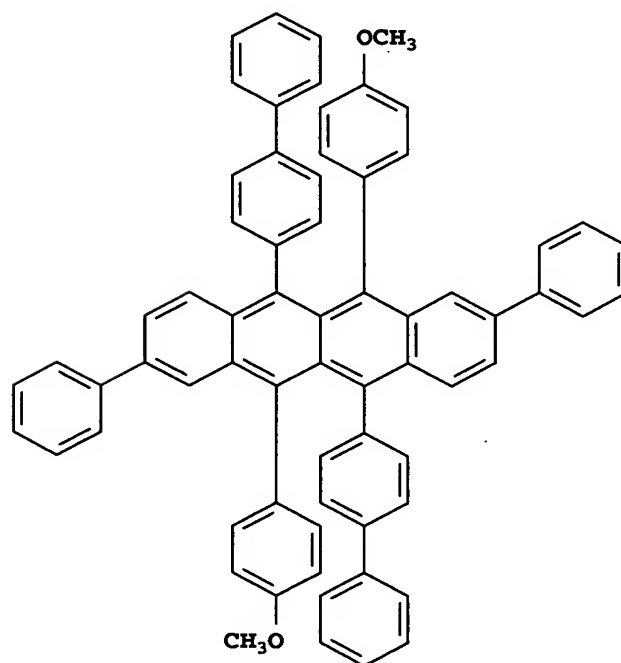


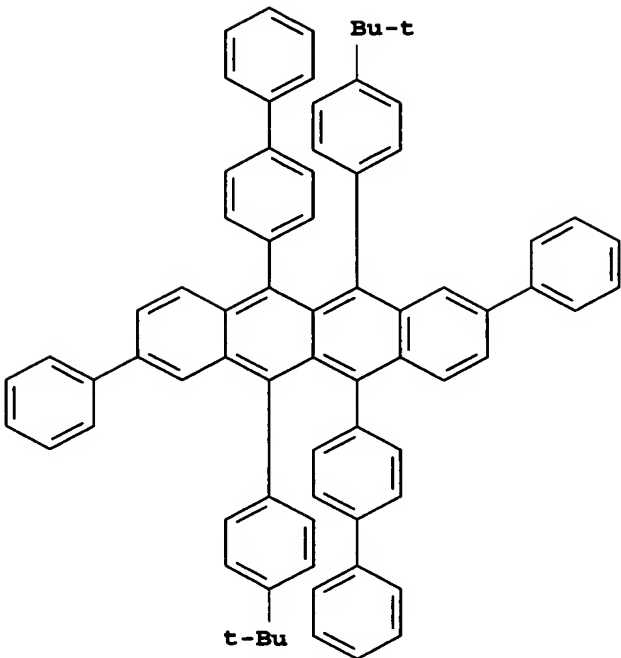
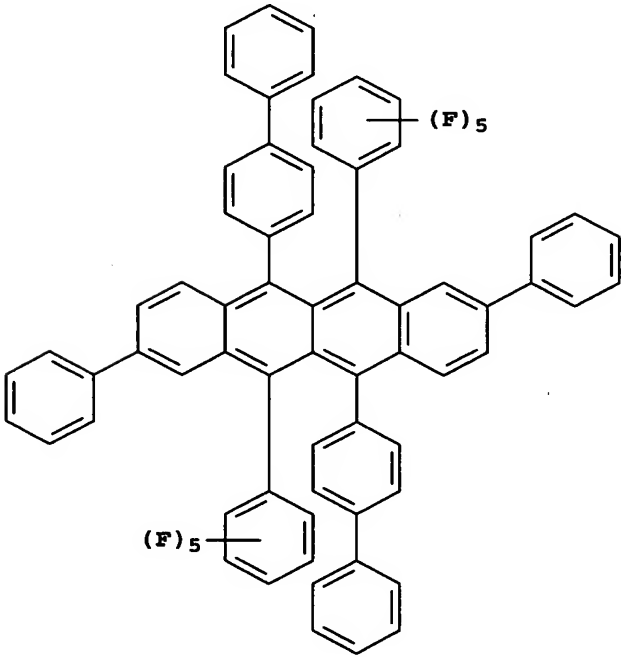


**Inv-8**

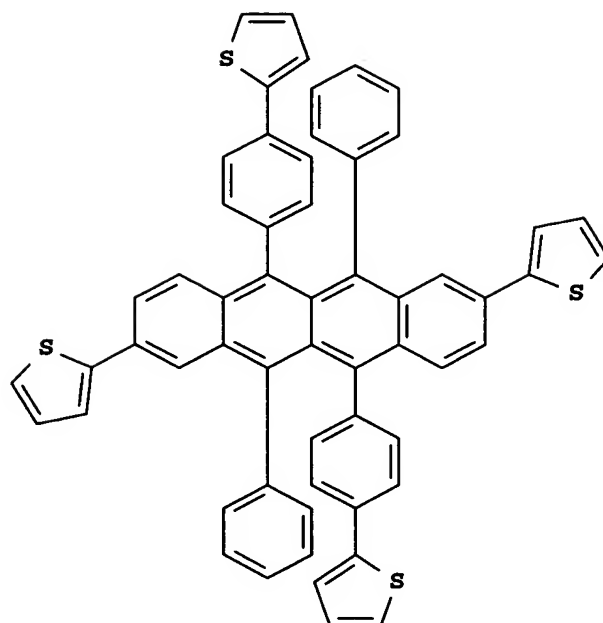


**Inv-9**

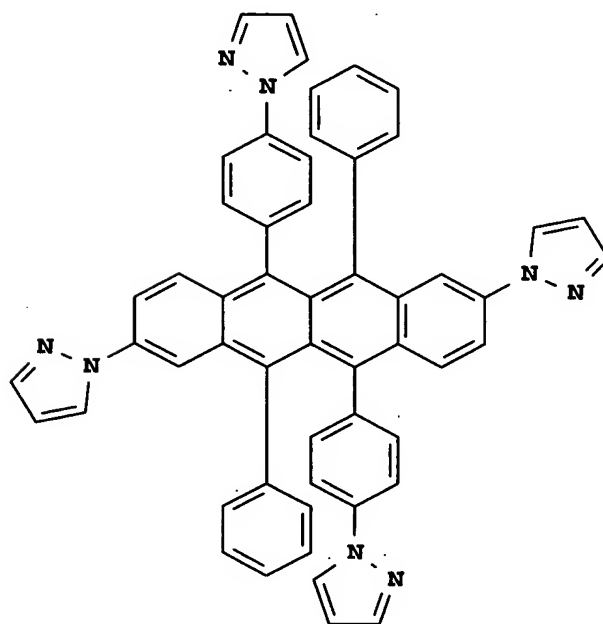


**Inv-10****Inv-11**

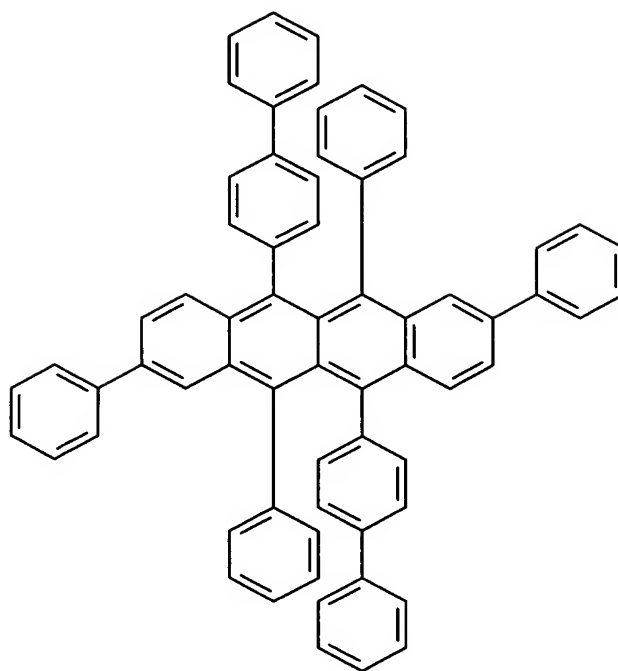
**Inv-12**



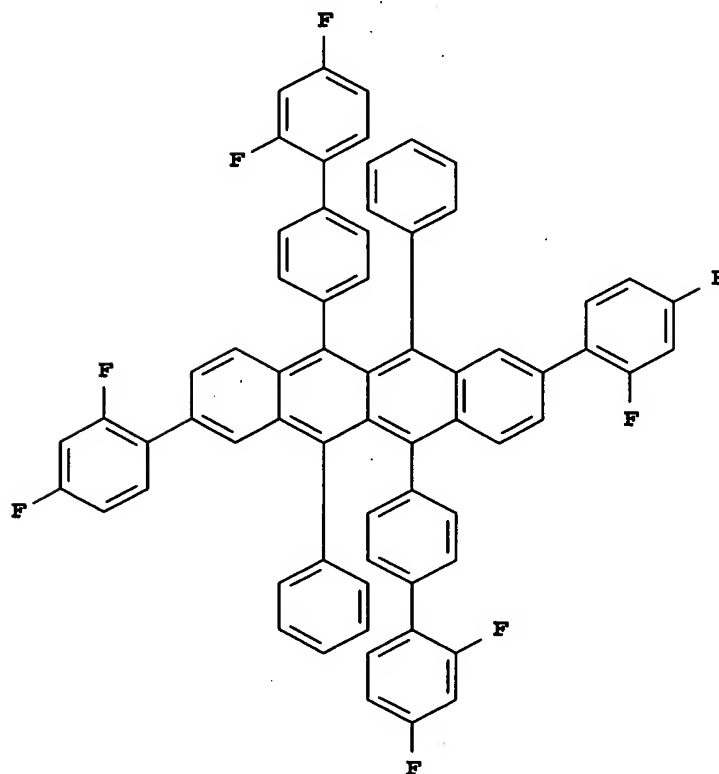
**Inv-13**



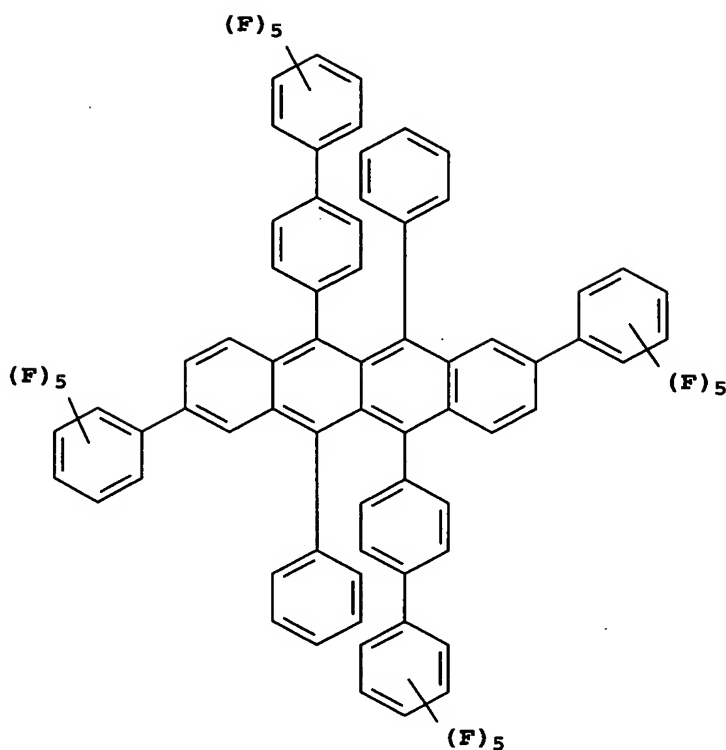
**Inv-14**



**Inv-15**



Inv-16



25. An OLED device of claim 1 wherein the rubrene derivative has a wavelength of maximum emission ( $\lambda_{\max}$ ) in ethyl acetate solution such that  $560\text{nm} < \lambda_{\max} \leq 650\text{nm}$ .

26. An OLED device of claim 25 wherein the rubrene derivative has a wavelength of maximum emission ( $\lambda_{\max}$ ) in ethyl acetate solution such that  $565\text{nm} < \lambda_{\max} \leq 625\text{nm}$ .

27. A light-emitting device containing the OLED device of claim 1.

28. A light-emitting display containing the OLED device of claim 1.

29. A method of emitting light comprising subjecting the device of claim 1 to an applied voltage.